ATION TREATY (PCT)

(12) INTERNATIONAL APPI

TION PUBLISHED UNDER THE PATENT COC

(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 15 January 2004 (15.01.2004)

PCT

(10) International Publication Number WO 2004/005100 A1

(51) International Patent Classification7:

B60T 17/00

(21) International Application Number:

PCT/GB2003/002827

(22) International Filing Date:

2 July 2003 (02.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0215421.9

3 July 2002 (03.07.2002) GB

- (71) Applicant (for all designated States except US): WABCO AUTOMOTIVE UK LIMITED [GB/GB]; Beacon Works, Texas Street, Morley, Leeds LS27 0HQ (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BLACKWOOD, Andrew, G., L. [GB/GB]; 2 Bromley Road, Shipley, York-shire BD18 4DS (GB). MILOMO, Ignitius [GB/GB]; 2 Paddock Drive, Drighlington, Bradford BD11 1LB (GB).

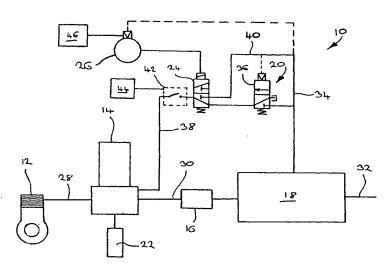
- (74) Agents: GRAY, James et al.; Withers & Rogers, Goldings House, 2 Hays Lane, London SE1 2HW (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: VEHICLE AIR SUPPLY SYSTEM



(57) Abstract: The invention relates to a vehicle air supply system (10) adaptable to occasionally supply large volumes of air at relatively low pressure for purposes such as tyre inflation. The system has a compressor (12), an air dryer (14), a reservoir (18) adapted to receive air from the compressor via the air dryer, and control means (20) operable to cause a standard regeneration of the air dryer when a predetermined system condition is met. The control means is also operable to cause an intermediate regeneration of the air dryer in advance of said predetermined system condition being met, wherein the control means are further operable to inhibit said intermediate regeneration. The control means is operable so as to prevent saturation of an air dryer desiccant in circumstances where the compressor is on load for an extended period of time, and thus likely to be pumping a large volume.